



# Oregon

Kate Brown, Governor

Department of Environmental Quality

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May 20, 2015

Stuart Dearden

Sanofi-Aventis U.S.  
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Subject: Outfall 22B IRAM Performance Monitoring First Quarter 2015 Report  
RP-Portland Site  
ECSI #155

Dear Mr. Dearden:

The Department of Environmental Quality (DEQ) received the subject report on May 11, 2015. The report was prepared by Golder Associates Inc for StarLink Logistics Inc. (StarLink) to document the 2015 first quarter results of water discharge sampling and analysis from Outfall 22B. Thank you for the submittal. DEQ's review comments are presented below.

## Comments

1. 1.0 Introduction. The report states that StarLink "repaired the deteriorated sewer system" DEQ notes that the 22B IRAM and 22B EIRAM were not "repairs." The stormwater system was not designed to preclude the infiltration of contaminated groundwater into the system. The lining of the 22B system was selected by DEQ as an interim remedial action to eliminate the infiltration of contaminated groundwater into the stormwater sewer system.
2. 1.2 Sampling and Analysis Plan Objectives. The SLVs presented in Table J-1 of the SAP are site specific SLVs, not JSCS SLVs. This should be modified in future monitoring reports.
3. 2.4 Surface Water Flow. The report states that surface water was observed flowing into catch basin CB-3 on the MMGL/Air Liquide property. Based on Figure 1, it is DEQ's understanding that CB-3 has been abandoned, therefore DEQ assumes that overland flow was observed flowing into catch basin CB-4.
4. 3.1 Outfall Flow Measurements and Observations. The method for calculating flow from the outfall was not done in accordance with the DEQ approved work plan<sup>1</sup>. Section 2.2 Flow Estimates of the work plan states that "*Discharge rate at the outfall will be measured with the flow meter. A bucket and stopwatch will be used if there is insufficient flow to use the flow meter.*" Golder instead estimated flow using the Chezy equation. This results in an unnecessary wide range of calculated discharge results from several sources

<sup>1</sup> DEQ 2015. *Final Outfall 22B IRAM Performance Monitoring, Sampling and Analysis Plan, Former Rhone-Poulenc-Portland Site*. Prepared by Oregon Department of Environmental Quality. February 2015.

of uncertainty and estimating error. Future observations need to be done in accordance with the work plan.

5. 3.2 Manhole Observations. The observed flow width and depth at each manhole were not tabulated. DEQ request that StarLink provide a tabulated summary of this information in future reports along with field visual estimates of flow (see Attachment for example).
6. Section 3.2 Manhole Observations. Future reports need to include a table showing all of the analytical results, including detection limits for non-detects.
7. 5.0 Deviations from the SAP. The alternate flow estimate methods implemented at the outfall were not identified in this section.
8. Table 2. Please provide ground surface elevation or the height of casing at each well.
9. 6.1.7. PCB Congeners. The report states that PCBs are not considered to be a RP COI. This is not correct. PCBs are a Rhone Poulenc COI<sup>2</sup>.
10. 6.2 Comparison to Other Datasets. The report states that NDL-RSSA samples represent urban/industrial stormwater background. DEQ does not agree. These samples were collected in the immediate vicinity of the Rhone-Poulenc site and maybe impacted by historical operation. This needs to be reflected in future reports, if referencing this dataset.
11. 8.8 Closing and Round 2 Summary. The report proposes several changes to the SAP. DEQ does not approve any of the proposed changes.
12. 8.8 Closing and Round 2 Summary. It is unclear from this section if StarLink intends to conduct the next round of sampling in accordance with Section 3.2 of the Work Plan. DEQ acknowledges that water inflow to the catch basins identified in the report has contributed to the volume of 22B outfall discharge, and also agrees that it may be reasonable to assume that some contribution of contamination detected in the outfall water sample could be associated with the catch basin inflow water. However, without additional sampling of observed water near the catch basin locations prior to capture and other lines of evidence, DEQ cannot conclude that the sampling results are not a reflection of groundwater infiltration into the 22B system with Rhone-Poulenc related contaminants.  
  
Therefore, for the 2015 second quarter sampling event, additional sampling must be conducted consistent with Section 3.2 of the Work Plan for the full suite of analytes presented in Table 1 of the SAP from manholes MH-10, MH-9, MH-8, MH-7, MH-6, MH-5, MH--4, MH-3, and Manhole 9 on the Metro property.
13. Laboratory Reports. DEQ request that StarLink submit all laboratory reports within 7 days of receipt.

DEQ appreciates the work conducted by StarLink to prepare the report. Please feel free to contact me at 503 229-6748 if you have any questions.

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<sup>2</sup> DEQ 2015. Rhone-Poulenc Remedial Investigation Report: Addendum-RI/SCE Report (November 19, 2010). Prepared by Oregon Department of Environmental Quality. April 2015.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott Manzano', with a stylized flourish at the end.

Scott Manzano, Project Manager  
DEQ NWR Cleanup Program

*Attachment: Table A-1 Field Observation of Flow Within the Outfall 22B Stormwater Sewer System*

C:     *Joan Underwood, Quantum Management Group*  
          *Jim Benedict, Cable, Huston, Benedict, Haagensen & Lloyd*  
          *Keith Johnson, DEQ*  
          *Sean Sheldrake, EPA*  
          *Kristine Koch, EPA*  
          *Gary Vrooman, DOJ Natural Resources*  
          *ECSI #155*



Attachment 1

**Table A-1 Field Observations of Flow Within the  
Outfall 22B Stormwater Sewer System**



**Table A-1**  
**Field Observation of Flow Within the Outfall 22B Stormwater Sewer System**  
**Outfall 22B IRAM Performance Monitoring First Quarter 2015 Report**  
**RP-Portland Site**

Location	Flow Estimate* (gpm)	Flow Depth	Flow Width	Comments
MH-17 (Air Liquide)	1 to 2	1/4"	12"	
MH-18 (Air Liquide)	1 to 2	1"	16"	
MH-19 (Air Liquide)	1 to 2	3/4"	16"	
MH-20 (Air Liquide)	1 to 2	3/4"	16"	
MH-10	1 to 2	1/8"	10"	
AL-CB-6	0.25 to 0.5			
MH-1 (Air Liquide)	0.5 to 1.5	1/4 to 1/2"	NR	
CB-4 (Air Liquide)	No flow	NR	NR	
CB-3 (Air Liquide)	1	NR	NR	
CB-9E	NR	NR	NR	Infiltration at pipe and curbside floor
CB-9W	NR	NR	NR	Infiltration possible through floor
MH-9	(>MH-10)	1"	8"	
CB-8E	trickle	NR	NR	Infiltration at cold joint
CB-8W	trickle	NR	NR	Infiltration at curbside corner
MH-8	NR	1.5"	14"	
CB-7E	NR	NR	NR	Road drain active. Possible infiltration at curbside wall and catch basin floor.
CB-W	NR	NR	NR	Road drain active. Possible infiltration at curbside wall and catch basin floor.
IB-3 (Gould)	trickle	NR	NR	overland flow
MH-3 (Gould)	0.25 to 0.5			
MH-4 (Gould)	0.25 to 0.5	NR	NR	
MH-7	NR	<1"	8"	
CB-6E	No flow			moist
CB-6W	No flow			most
CB-5E	No flow			wet
CB-5W	No flow			dry
MH-6	NR	3/4 to 1"	18"	maybe more flow
CB-4E	No flow			dry
CB-4W	No flow			dry
CB-3E	trickle			possible floor infiltration
CB-3W	trickle			
MH-4	NR	1 3/8"	21"	
MW-3	NR	3/4"	13"	trickle from MH-5
CB-2E	No flow			dry
CB-2W	No flow			dry
CB-1E	No flow			dry
CB-1W	No flow			dry

\* Flow estimate is based on visual field observation of field staff. Estimates are not based on flow calculations or field interments. See field notes.

NR - Not reported

gpm - gallons per minute